ABSTRACT

A fluid having utility in subterranean wells is formulated to include: an oleaginous fluid; and a solids tolerance agent having the formula:

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in which R is a C₆ to C₂₀ aliphatic group and R' is a C₂ to C₆ aliphatic group and x has a value from about 1 to about 10. Preferably R' is selected from ethyl and isopropyl and R is an unsaturated aliphatic group. The fluid is formulated such that the oleaginous fluid is from about 30% to about 99% by volume of said fluid. In one illustrative embodiment, the oleaginous fluid is composed from about 5% to about 100% by volume of the oleaginous fluid of a material selected from a group consisting of diesel oil, mineral oil, synthetic oil, esters, ethers, acetals, di-alkylcarbonates, olefins, and combinations of these and similar fluids. A non-oleaginous fluid may also be included in the formulation that is from about 1% to about 70% by volume of said fluid. The non-oleaginous fluid is preferably selected from sea water, a brine containing organic or inorganic dissolved salts, a liquid containing water-miscible organic compounds, and combinations thereof. Also included in the fluid formulation may be weighting agents, fluids loss agents, viscosity agents and other similar agents utilized in the formulation of oil-based and invert emulsion drilling fluids.